REMARKS

In response to the Office Action mailed February 18, 2010, Applicant respectfully requests reconsideration. To further the prosecution of the application, amendments have been made in the claims and the following remarks are provided. An RCE is submitted with this response to ensure entry of the amendments. No new matter has been added.

I. Claim Objections

Claim 2 was objected to as including a limitation that does not further limit the parent claim. Without acceding to the propriety of the objection or the Examiner's statement regarding the meaning of the term "arcuate," Applicant has amended claim 2 in an effort to address the Examiner's concern.

II. Claim Rejections – 35 U.S.C. §102

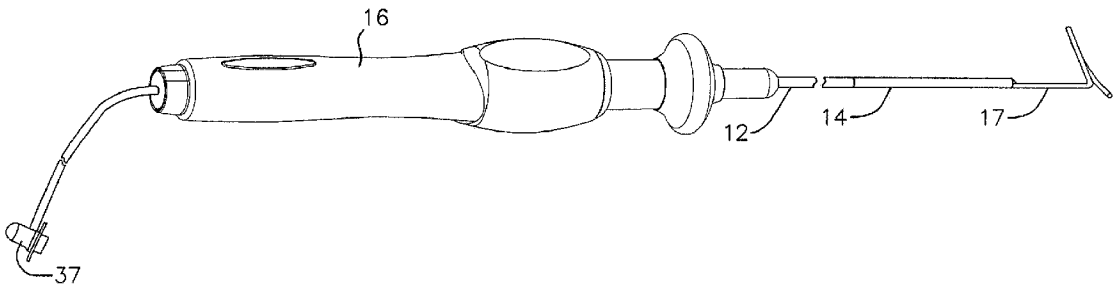
Claim 1 was rejected under 35 U.S.C. §102(e) as allegedly being anticipated by U.S. Patent Application Publication No. 2002/0165441 ("Coleman"). This rejection is respectfully traversed.

a. Discussion of Coleman

Coleman describes a mapping catheter comprising a catheter body 12, an intermediate section 14 at the distal end of the catheter body, a control handle 16 at the proximal end of the catheter body, and a mapping assembly 17 mounted at the distal end of the catheter to the intermediate section [0029]. Fig. 1, which illustrates these portions of the catheter, is reproduced below. The mapping assembly 17 comprises a support member 24 made of a material having shape-memory, which is capable of substantially returning to its original shape upon removal of a force [0036], [0040]. The proximal end of the support member 24 is described, in one embodiment, as terminating at a location near the junction of mapping assembly 17 and intermediate section 14 (i.e., a short distance within the third lumen 32) so as not to adversely affect the ability of the intermediate section 14 to deflect [0047]. Two puller wires 64 are provided for deflection of the intermediate section 14 [0049]. The puller wires 64 are described as being anchored at their distal

ends to the intermediate section 14 [0049]. Coleman further states that if the intermediate section 14 is eliminated, the distal ends of the puller wires 64 are anchored at or near the distal end of the catheter body 12 [0049]. Thus, Coleman describes the distal ends of the puller wires 64 as being anchored either to the intermediate section 14, or if the intermediate section 14 is eliminated, at or near the distal end of the catheter body 12. The support member 24, on the other hand, imparts a desired shape to the mapping assembly 17, which is distal to both the intermediate section 14 and the catheter body 12.

FIG. 1



The puller wires 64 are provided for deflection of the intermediate section 14 [0049]. In particular, longitudinal movement of a puller wire 64 relative to the catheter body 12 results in deflection of the intermediate section 14 in the direction of the side to which that puller wire is anchored [0054].

b. Discussion of Rejection of Claim 1

As amended, claim 1 recites, *inter alia*, "a cable, *attached* to the actuator and *the tip assembly*, that extends through the shaft, the cable being *adapted to change a radius of curvature of the distal end of the tip assembly* in response to movement of the actuator."

The Office Action references either of puller wires 64 of Coleman as allegedly corresponding to the cable recited in claim 1, and the tip mapping assembly 17 as allegedly corresponding to the tip assembly recited in claim 1. However, as may be appreciated from the

discussion of Coleman above, the puller wires 64 of Coleman are not "attached to... the tip assembly" (i.e. tip mapping assembly 17).

Further, as may be appreciated from the discussion of Coleman above, the puller wires 64 of Coleman are not "adapted to change a radius of curvature of the distal end of the tip assembly" or any other portion of the catheter described in Coleman. As none of the dependent claims were rejected on the basis of Coleman (some of which recited the cable being "adapted to change a radius of curvature of the distal end of the tip assembly" in some manner), it appears that this position may be uncontested.

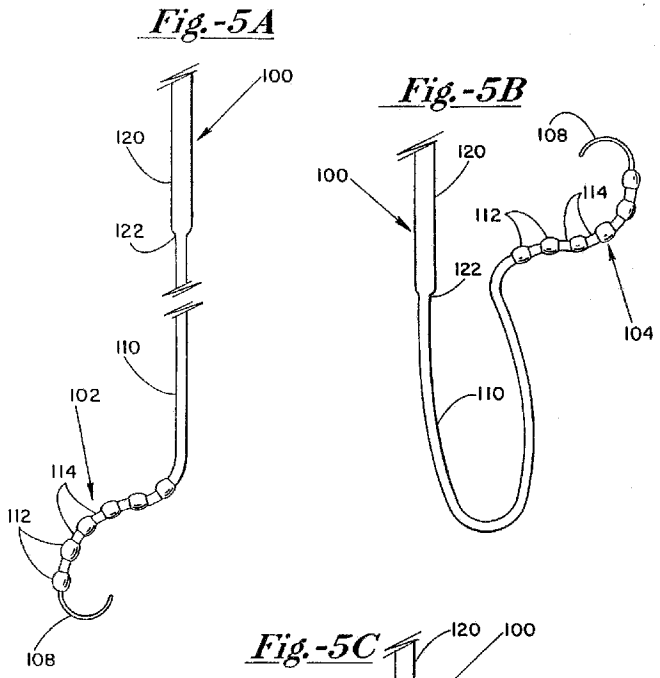
In view of the foregoing, claim 1 patentably distinguishes over Coleman, and the rejection of this claim under 35 U.S.C. §102(e) should be withdrawn.

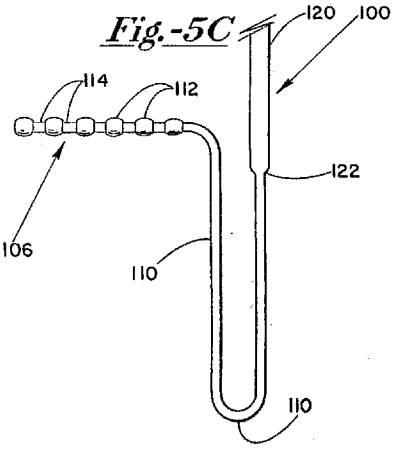
III. Claim Rejections – 35 U.S.C. §103

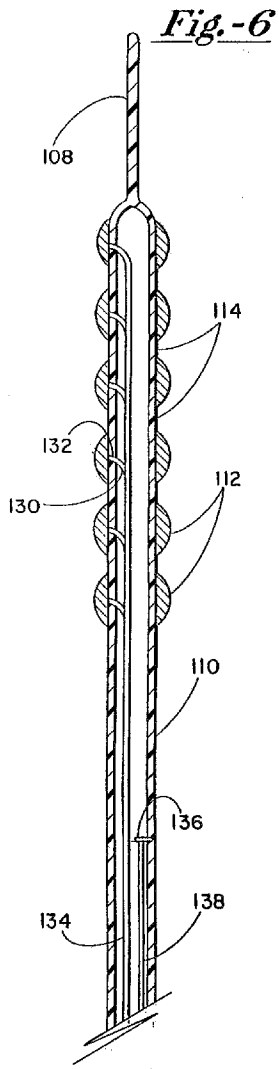
Claims 1-3, 5-6 and 14-15 (including independent claim 1) were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 5,642,736 ("Avitall") in view of U.S. Patent No. 5,575,772 ("Lennox") and in view of U.S. Patent No. 5,810,887 ("Accorti"). These rejections are respectfully traversed.

a. Discussion of Avitall (Primary Reference Applied)

Avitall describes catheters including tip sections of predetermined fixed shapes in connection with Figs. 5A-5C and Fig. 6, which are reproduced below (col. 5, lines 13-18). The sections of the catheter tip 100 having the predetermined fixed shapes are labeled 102, 104 and 106, respectively, in Figs. 5A-5C (col. 7, lines 17-19). The catheter tip 100 further includes a highly flexible proximal segment 110 that operates to maneuver the pre-shaped portion (col. 7, lines 25-28). In particular, referring to Fig. 6, the flexible segment 110 includes a control pin 136 and a control wire 138 to maneuver the pre-shaped portion (col. 7, lines 55-57).







Thus, Avitall shows and describes the control wire 138 as being anchored at its distal end to the highly flexible proximal segment 110, which is proximal to the predetermined fixed shape 102, 104 or 106. Further, control wire 138 is described as maneuvering the pre-shaped portion (col. 7, lines 25-28 and 55-57) and not as changing the radius of curvature of the distal end of the tip assembly. Indeed, the anchoring position of the control wire 138 appears incompatible with changing the radius of curvature of the distal end of the tip assembly.

While the Office Action indicates that wire 64 or wire 62 corresponds to the cable recited in claim 1, the embodiment including wires 64 and 62 (i.e., the embodiment shown in Fig. 3) does not

include a biased tip assembly. Indeed, it would not make sense use the steering configuration of the embodiment of Fig. 3 in connection with the predetermined fixed shape 102, 104 or 106 since such shapes, while maneuverable, are intended to be *fixed* (see e.g., col. 3, lines 62-65 referencing the "limitations of a fixed shape").

b. Discussion of Rejection of Claim 1

As amended, claim 1 recites, *inter alia*, "a tip assembly having a proximal end and a distal end, the proximal end of the tip assembly being attached to the distal end of the shaft, and the tip assembly including a wire formed of a superelastic material and shaped to bias the tip assembly in a first orientation including a curved shape" and "a cable, attached to the actuator and the tip assembly, that extends through the shaft, the cable being adapted to change a radius of curvature of the distal end of the tip assembly in response to movement of the actuator."

The Office Action references either of wires 64 or 62 of Avitall as allegedly corresponding to the cable recited in claim 1. However, as may be appreciated from the discussion of Avitall above, the embodiment including wires 64 and 62 (i.e., the embodiment shown in Fig. 3) does not include "a tip assembly.... including a wire formed of a superelastic material and shaped to bias the tip assembly in a first orientation including a curved shape."

The Office Action references tip assembly 14 of Avitall as allegedly corresponding to the tip assembly recited in claim 1. Again, however, the embodiment including tip assembly 14 does not include "a wire formed of a superelastic material and shaped to bias the tip assembly in a first orientation including a curved shape." Further, while the embodiments of Figs. 5A-5C and Fig. 6 include catheter tip sections of predetermined fixed shapes, these embodiments do not include "a cable, attached to... the tip assembly" or "a cable... adapted to change a radius of curvature of the distal end of the tip assembly," and there is simply no motivation to modify Avitall to include these features.

In view of the foregoing, claim 1 patentably distinguishes over the cited combination of Avitall, Lennox and Accorti, and the rejection of this claim under 35 U.S.C. §103(a) should be withdrawn.

IV. Dependent Claims

Since each of the dependent claims depends from a base claim that is believed to be in condition for allowance (as discussed above), Applicant believes that it is unnecessary at this time to argue the allowability of each of the dependent claims individually. However, Applicant does not necessarily concur that the basis for the rejection of any of the dependent claims is proper. Therefore, Applicant reserves the right to specifically address the patentability of the dependent claims in the future, if deemed necessary.

CONCLUSION

It is respectfully believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment set forth in the Office Action does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Furthermore, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify any concession of unpatentability of the claim prior to its amendment.

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' representative at the telephone number indicated below to discuss any outstanding issues relating to the allowability of the application.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 23/2825 under Docket No. B1075.70032US00 from which the undersigned is authorized to draw.

Dated: May 17, 2010

Respectfully submitted,

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